

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006905**Date Inspected:** 06-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** ZPMC and ABF**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS tower**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

**Bay #10 South and North Tower Shop**

South tower lift #1:- Caltrans QA inspector performed final VT inspection on the fillet welds of stiffeners for internal splice plate #SA105. The internal splice plate #SA105 is connected to skin plate #D. All the fillet welds for VT inspection have been accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the fillet welds on stiffener to skin plates appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

North tower lift #1:- Caltrans QA inspector performed final VT inspection on the fillet welds of stiffener for internal splice plate # SA97, SA105, SA106, SA108 and SA109. The internal splice plates are connected to skin plate #B, C and D. All the fillet welds for VT inspection have been accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the fillet welds on stiffener to skin plates appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

South tower lift #1:- Caltrans QA Inspector observed five welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 9m to 47.6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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South tower lift#1:- Caltrans QA Inspector observed five welders performed FCAW process on PJP welds for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 9m to 47.6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW PJP welds are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

### Bay #11 East and West Tower Shop

East Tower Lift#1:- Caltrans QA Inspector observed seven welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 9m to 47.6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East Tower Lift #2:-Caltrans QA Inspector observed four ZPMC workers performed grinding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 53m to 80.75m interior diaphragm of skin A, D and E. The grinding process is removing the weld profiles that have been rejected by VT inspection. Base on Caltrans observation, no discrepancies were noted.

West Tower Lift #2:- Caltrans QA Inspector observed five ZPMC welders in process SMAW tack welding on skin plate C to D and D to E of west tower lift 2. A numerous temporary tack welds have been welded attach to the skin plate have been secured. Base on Caltrans QAI observation, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As noted within the report above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pau, Wai	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford, William	QA Reviewer

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